

Patent Application No. 09/681,643

IN THE CLAIMS:

Please add new claim 22 as follows:

Claim 1. (previously presented) A manufacturing method of an active matrix device including a top gate type TFT, which comprises a process of forming the top gate type TFT, wherein the process of forming the top gate type TFT includes the steps of:

5 forming an oxide film on an inner wall of a CVD processing chamber; arranging a substrate having source and drain electrodes formed therein in the processing chamber;

doping the source and drain electrodes with P;

10 forming an a-Si layer and a gate insulating film in the processing chamber; and

wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P.

Claim 2. (original) A manufacturing method of an active matrix device according to claim 1, wherein the process of forming the top gate type TFT further comprises the step of removing the oxide film from the inner wall after the step of forming the a-Si layer and the gate 5 insulating film.

Claim 3. (original) A manufacturing method of an active matrix device according to claim 1, wherein the oxide film contains SiO_x.

Claim 4. (original) A manufacturing method of an active matrix device according to claim 1, wherein the active matrix device is a liquid crystal display.

Claim 5. (original) A manufacturing method of an active matrix device according to claim 1, wherein the active matrix device is an electroluminescence display.

Claim 6. (original) A manufacturing method of an active matrix device according to claim 2, wherein the oxide film contains SiO_x.

Claim 7. (original) A manufacturing method of an active matrix device according to claim 2, wherein the active matrix device is a liquid crystal display.

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Claim 8. (original) A manufacturing method of an active matrix device according to claim 3, wherein the active matrix device is a liquid crystal display.

Claim 9. (original) A manufacturing method of an active matrix device according to claim 2, wherein the active matrix device is an electroluminescence display.

Claim 10. (original) A manufacturing method of an active matrix device according to claim 3, wherein the active matrix device is an electroluminescence display.

Claims 11-16 (cancelled)

Claim 17. (previously presented) A manufacturing method of an active matrix device according to claim 1, further comprising heating the inner wall of the CVD processing chamber.

Claim 18. (previously presented) A manufacturing method of an active matrix device according to claim 1, wherein the oxide film is selected from the group consisting of SiO_x, Al₂O₃, TiO₂, Al₂(Si₂O₅)(OH)₄, MgAl₂O₄, TaO_x, and ZrO_x.

Claim 19. (previously presented) A manufacturing method of an active matrix device including a top gate type TFT, which comprises a process of forming the top gate type TFT, wherein the process of forming the top gate type TFT includes the steps of:

5 forming an oxide film on an inner wall of a CVD processing chamber, the oxide film being at least 50 nm thick;

arranging a substrate having source and drain electrodes formed therein in the processing chamber;

doping the source and drain electrodes with P;

10 forming an a-Si layer and a gate insulating film in the processing chamber; and

wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P.

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Claim 20. (previously presented) A manufacturing method of an active matrix device according to claim 19, wherein the oxide film is approximately 100 nm.

Claim 21. (previously presented) A manufacturing method of an active matrix device according to claim 19, wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P.

Claim 22. (new) A manufacturing method of an active matrix device according to claim 1, further comprising:

depositing a first gate insulating film;
5 forming the drain and source electrodes after depositing the first gate insulating film before forming the oxide film on the inner wall of the CVD processing chamber

depositing a second gate insulating film after forming the a-Si layer;
10 removing the oxide film after depositing the second gate insulating film;

wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P; and

15 wherein doping the source and drain electrodes, forming the a-Si layer, and depositing the second gate insulating film is carried out in the CVD processing chamber.